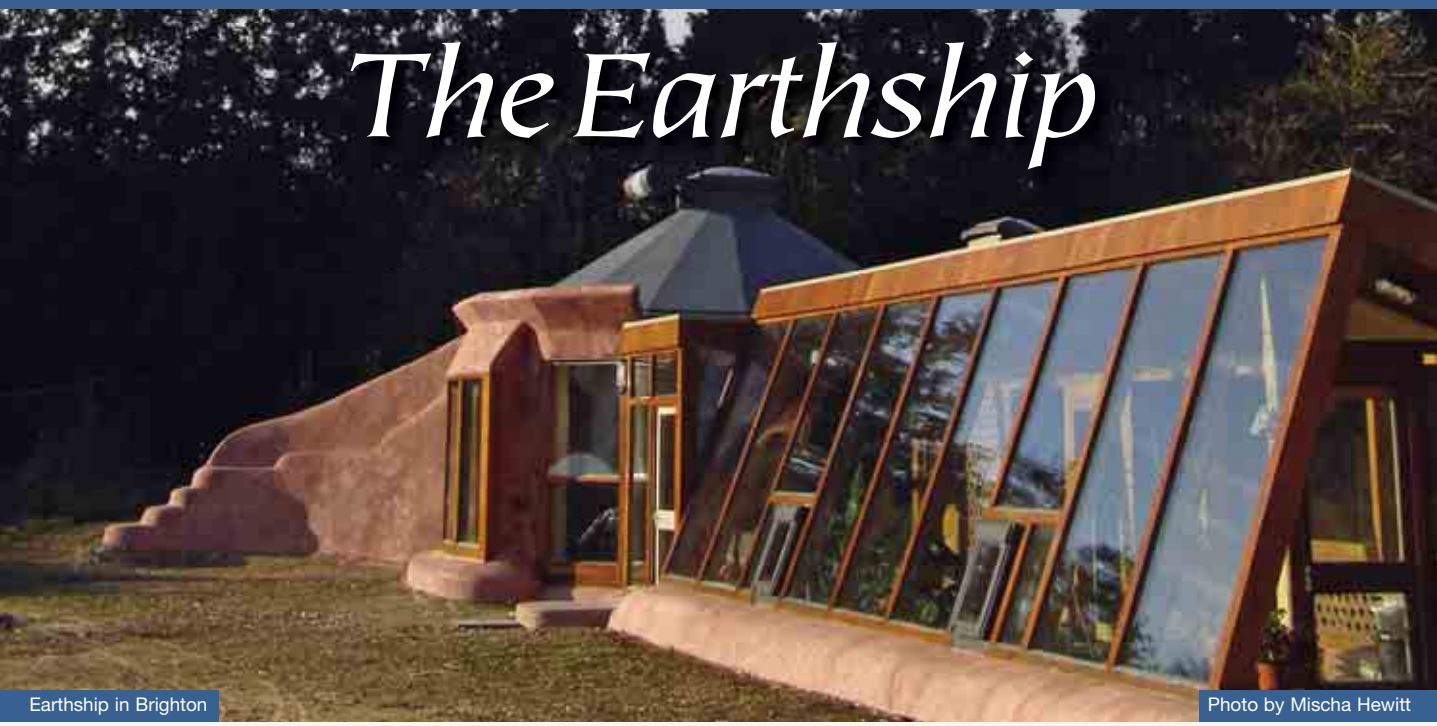
the home of the future – built from waste – dirt cheap to run

The Earthship



Earthship in Brighton

Photo by Mischa Hewitt

The Earthship is the home of the future and it can help save the future of our planet. How? Earthships are built using recycled materials, especially old car tyres. Every year, there are 48 million used tyres in Britain that have to be thrown away. They are either buried in tips or burnt, creating greenhouse gases. The growing mountain of car tyres is a huge environmental concern, but now, in the building of Earthship homes, one problem can be used to solve another. The mountain of old tyres can provide homes for people who need them.

Old bottles, reclaimed wood and other waste materials are also used in the construction of these homes. And that's not all – another important advantage of Earthships is that they cost almost nothing to run.

The Earthship is a house that:

- takes heat from the sun so your heating bills are very small
- maintains a comfortable living temperature: neither too hot, nor too cold
- makes electricity from sun and wind
- collects its own water from rain so you never have to pay water bills
- disposes of all waste.

A happy customer of a two-bedroom Earthship wrote:

"The lowest temperature in my house was 21°C and the highest 24°C. The total energy bill for the year was only £25."

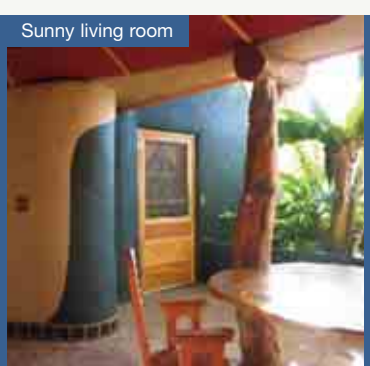
A builder said:

"These walls will still be here in 800 years' time – that's how long rubber tyres last. My daughter's children will be able to come and see what I've done long after I'm gone."

Cosy bedroom

Mike Reynolds, the man who first thought up this new eco-house, called it 'The Earthship' because it is designed to be a home that will 'sail' into the future.

For more information and how to contact us, go to www.lowcarbon.co.uk



Sunny living room

Tyres make the perfect building material. They are packed with earth, stacked like bricks and plastered.

A plan of a simple Earthship

Solar panels are set above the building to make electricity from sunlight. Solar power provides enough energy to run lights and electrical equipment and to heat up water. Batteries can store sunlight energy for several days.

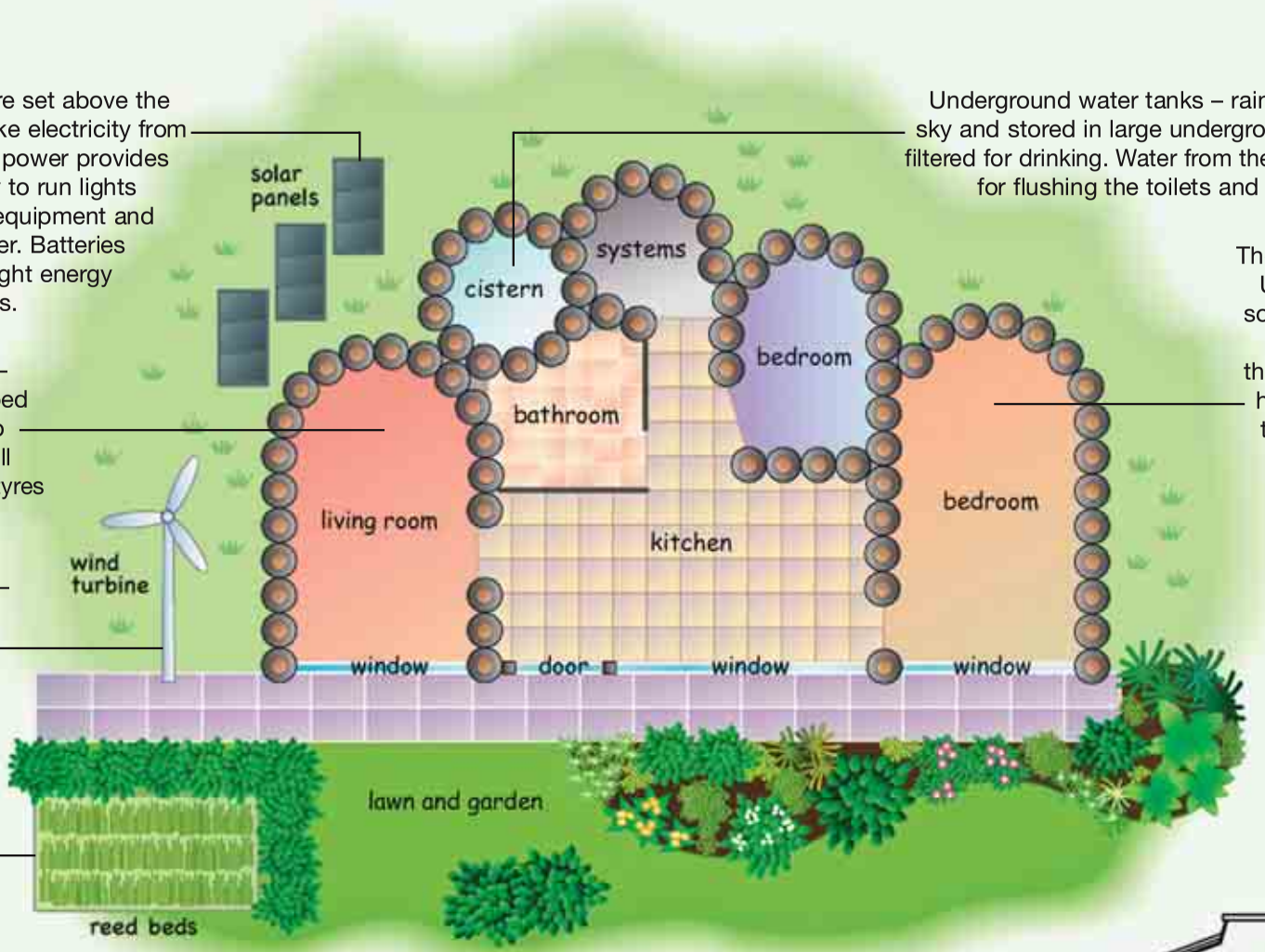
Living spaces – usually U-shaped rooms dug into the side of a hill and lined with tyres on three sides.

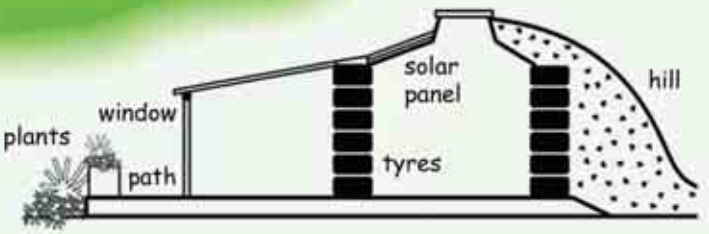
Wind turbines – electricity is also made from wind energy.

Reed beds – human waste recycled here.

Underground water tanks – rain is caught from the sky and stored in large underground tanks. Water is filtered for drinking. Water from the shower is recycled for flushing the toilets and for watering plants.

The open end of each U-shaped room is a south-facing window, so, during the day, the sun shines in and heats it up. At night, the soil surrounding the rooms radiates the heat back in. No other form of heating or cooling is required. The temperature never falls below 15°C, as the walls are capable of storing heat for weeks.





Earthships are built partly underground in the side of a hill.